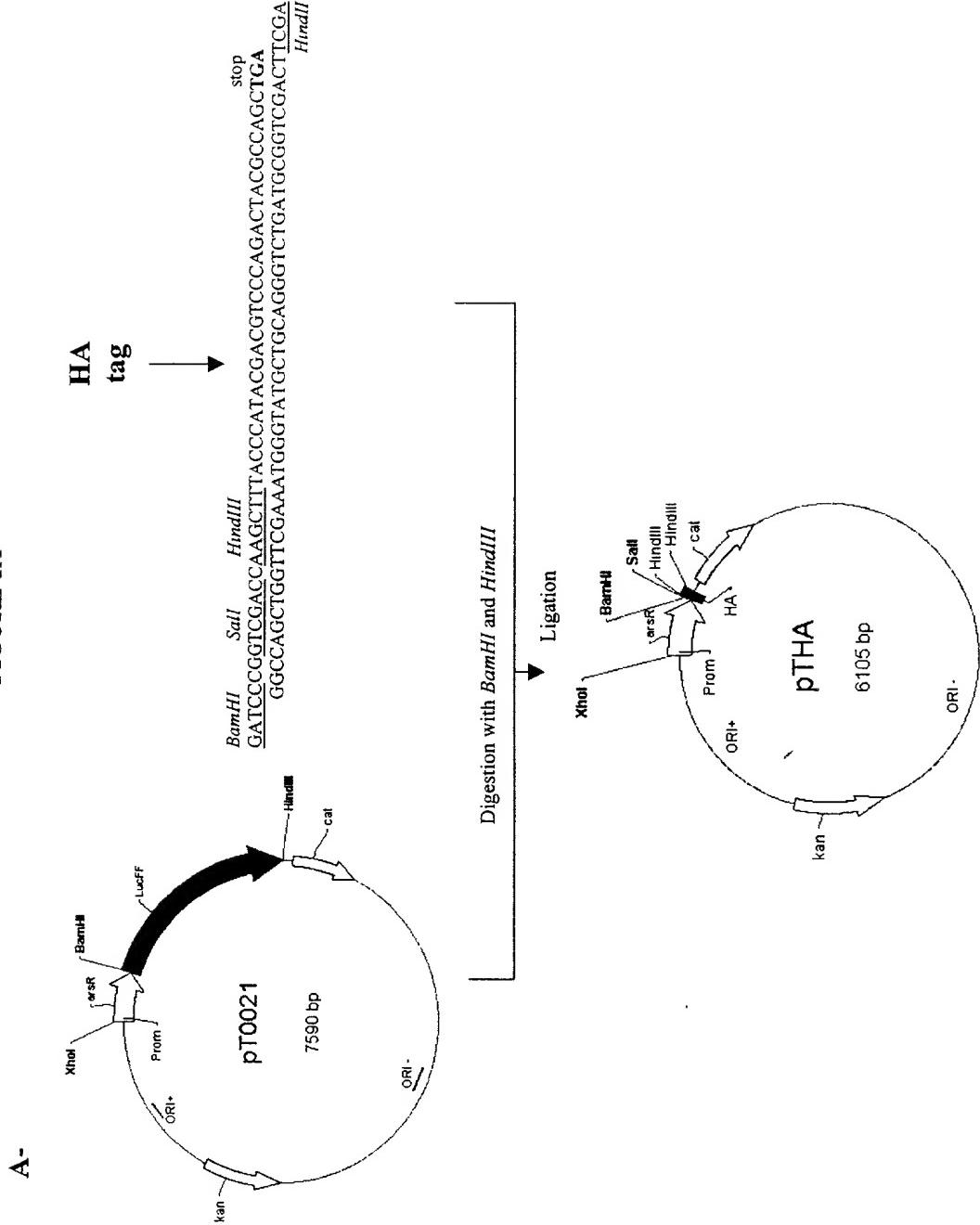


FIGURE 1A



B-

FIGURE 1B

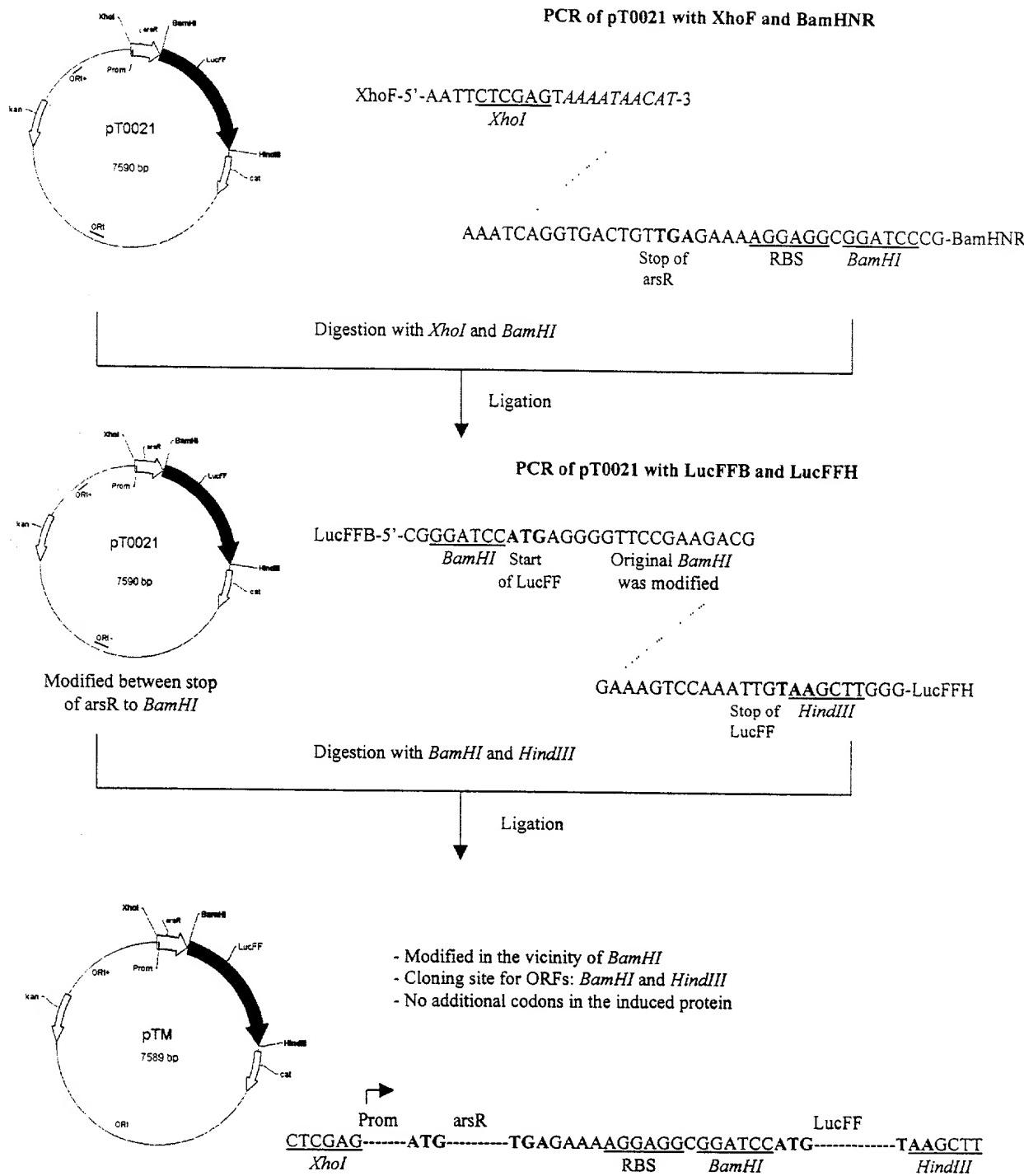


FIGURE 1C

C-

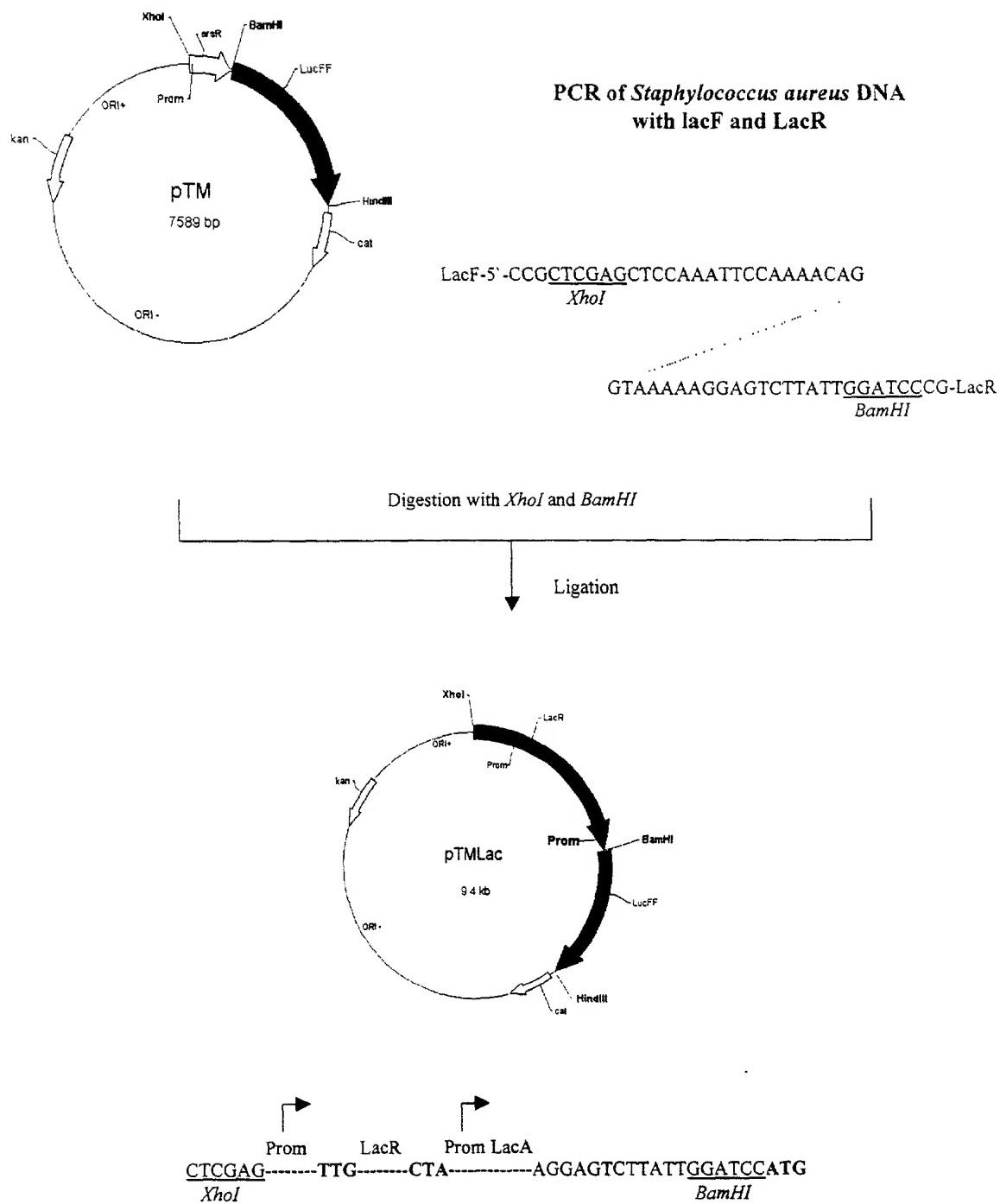


FIGURE 2A

A-

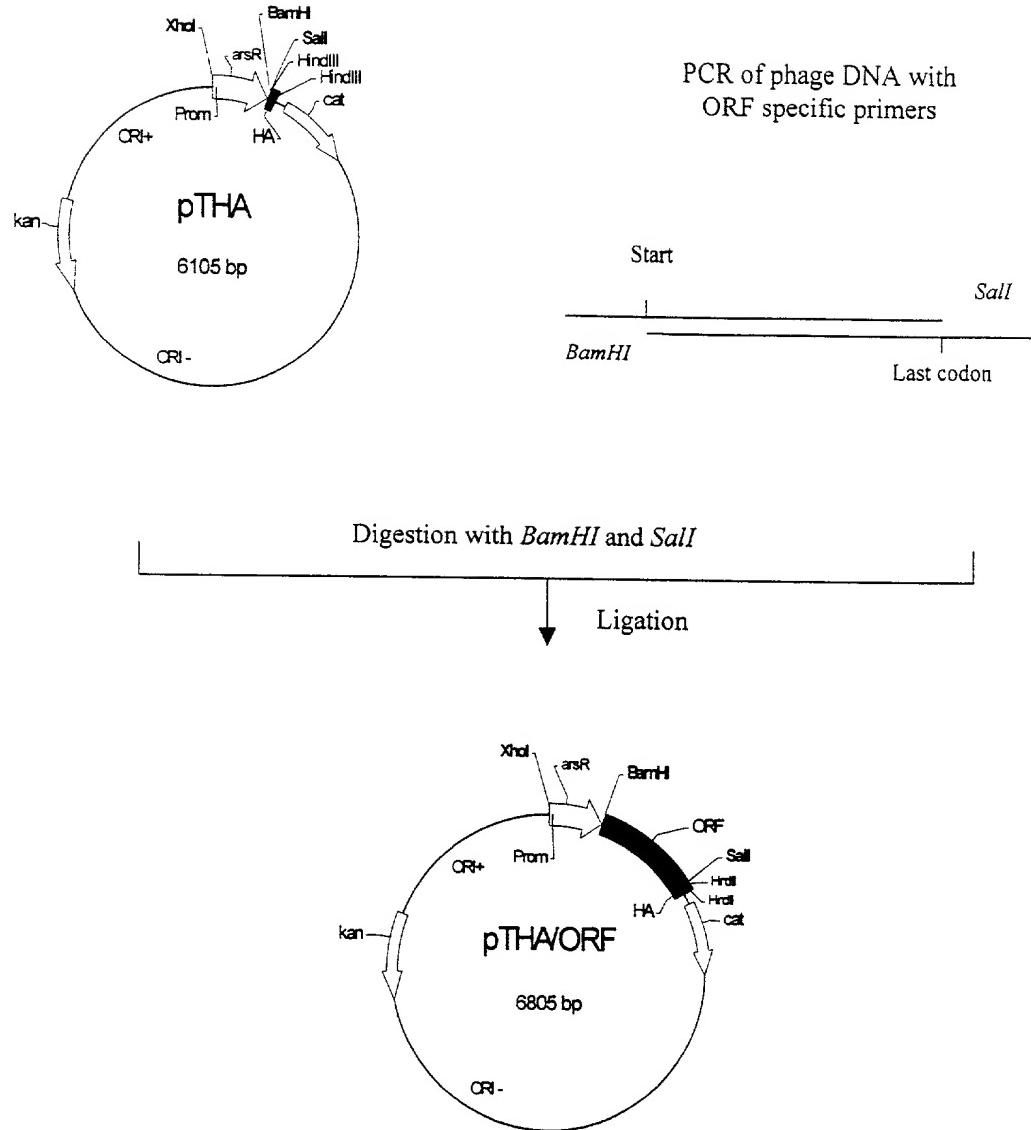


FIGURE 2B

B-

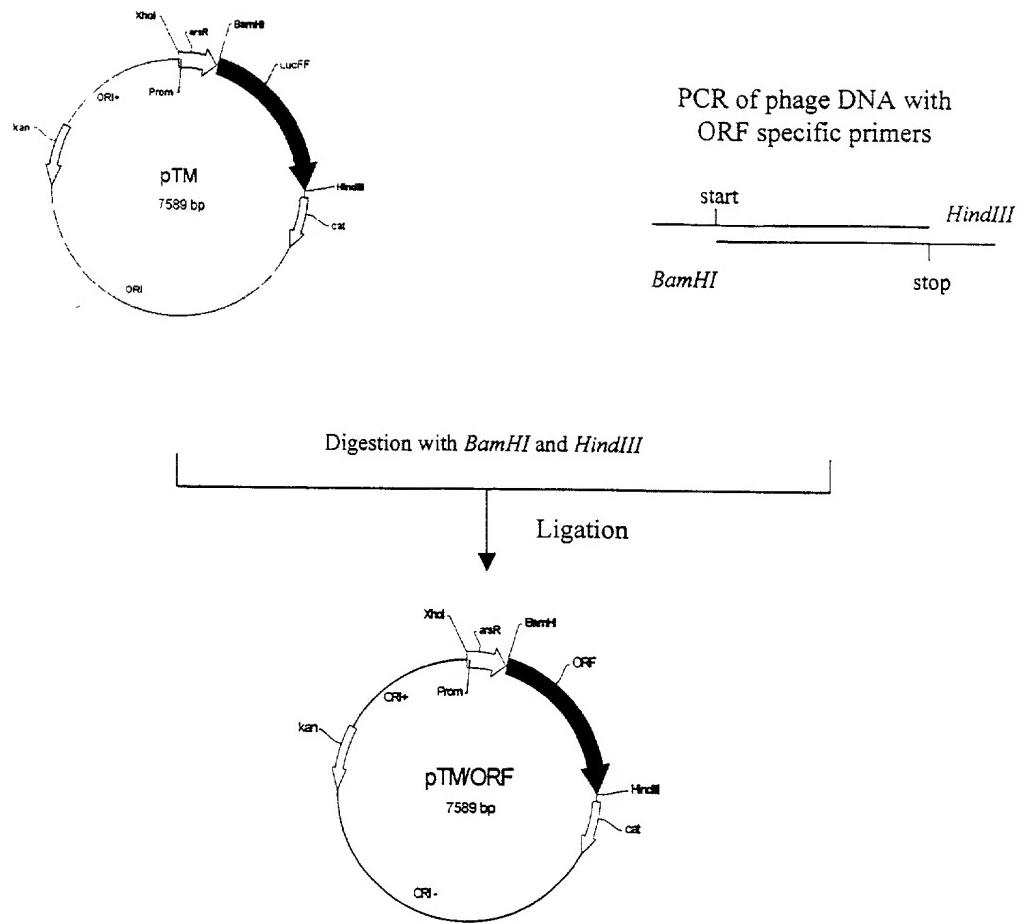
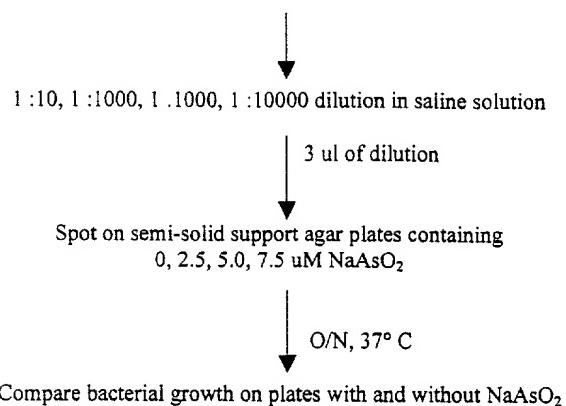


FIGURE 3

A) Functional assay on semi-solid support medium

O/N culture inoculated from frozen stock
of phage ORF *Staphylococcus aureus* RN4220 transformants



B) Functional assay in liquid medium

O/N culture inoculated from frozen stock
of phage ORF *Staphylococcus aureus* RN4220 transformants

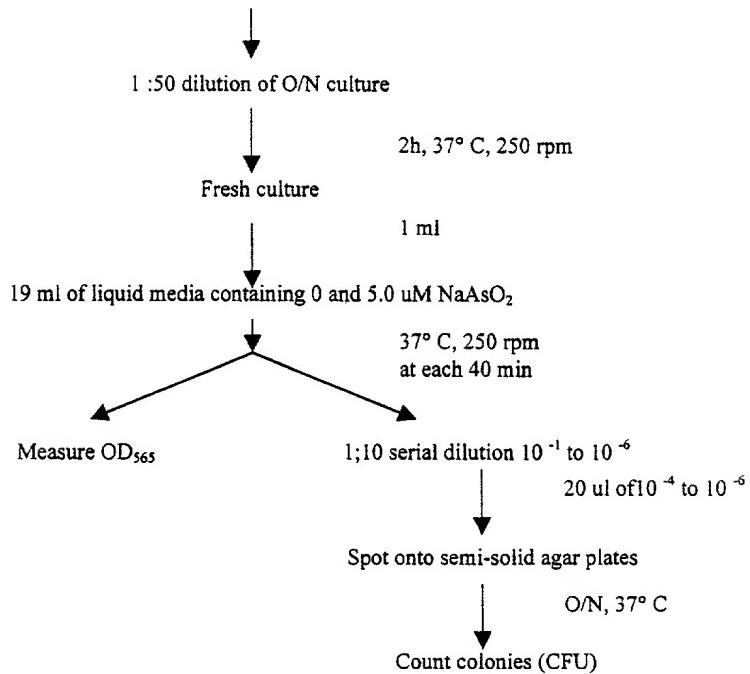


FIGURE 4A

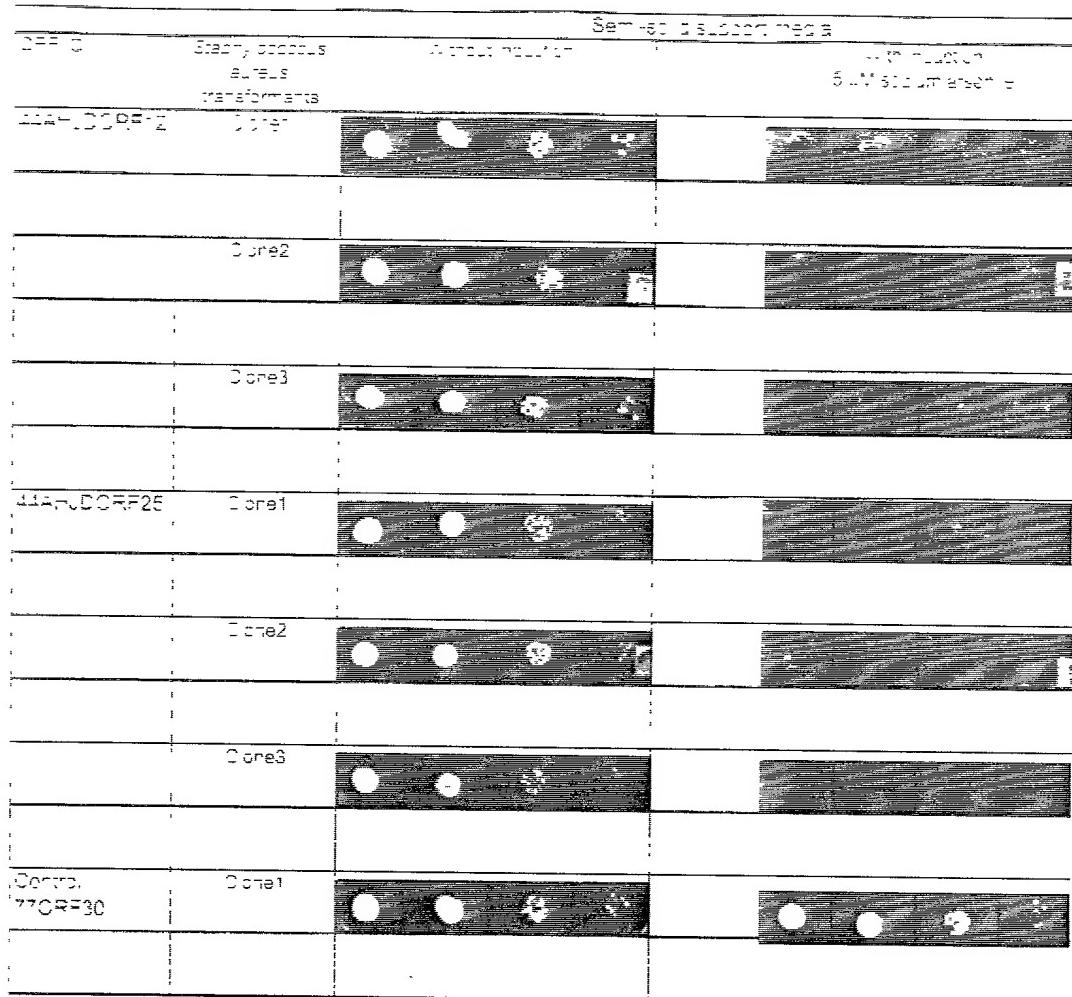
A-

44AHJD ORFs tested for functional analysis

| UID | POS |
|--------------|--------------|
| 44AHJDORF001 | 12627..10342 |
| 44AHJDORF002 | 3789..5732 |
| 44AHJDORF003 | 6626..8389 |
| 44AHJDORF004 | 8764..10227 |
| 44AHJDORF005 | 13890..12643 |
| 44AHJDORF006 | 803..2029 |
| 44AHJDORF007 | 2044..3027 |
| 44AHJDORF008 | 3020..3775 |
| 44AHJDORF009 | 5744..6496 |
| 44AHJDORF010 | 14420..13938 |
| 44AHJDORF011 | 15593..15225 |
| 44AHJDORF012 | 8391..8813 |
| 44AHJDORF013 | 14996..14586 |
| 44AHJDORF019 | 9836..9630 |
| 44AHJDORF023 | 6494..6315 |
| 44AHJDORF025 | 15175..14999 |
| 44AHJDORF027 | 12916..13080 |
| 44AHJDORF028 | 9235..9071 |
| 44AHJDORF035 | 13957..13811 |
| 44AHJDORF036 | 10165..10019 |
| 44AHJDORF039 | 1743..1883 |
| 44AHJDORF040 | 9740..9877 |
| 44AHJDORF044 | 12917..12783 |
| 44AHJDORF046 | 4891..5019 |
| 44AHJDORF048 | 15340..15212 |
| 44AHJDORF049 | 5784..5909 |
| 44AHJDORF053 | 3348..3467 |
| 44AHJDORF113 | 199..600 |
| 44AHJDORF114 | 16172..15870 |
| 44AHJDORF121 | 16362..16165 |
| 44AHJDORF123 | 614..796 |

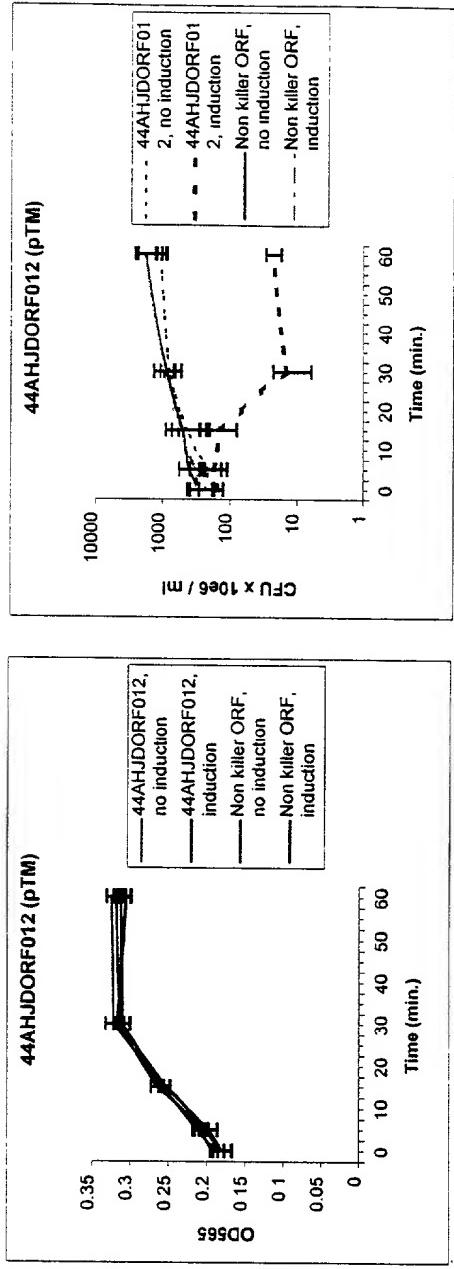
FIGURE 4B

B-



A-

FIGURE 5A



**Fig
.5B**

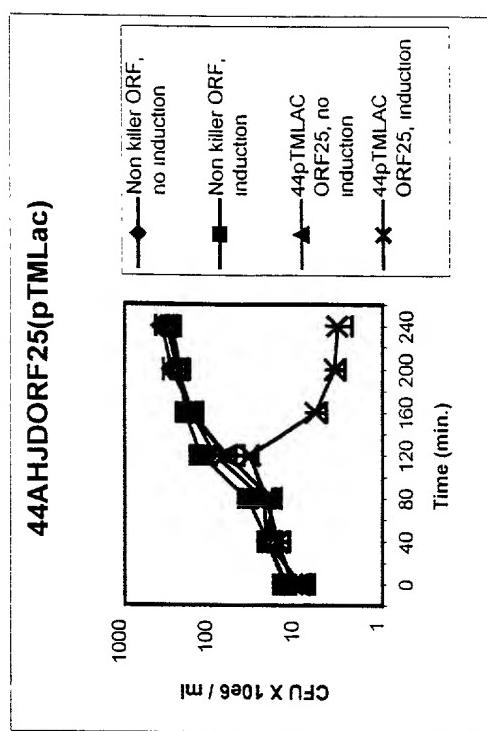
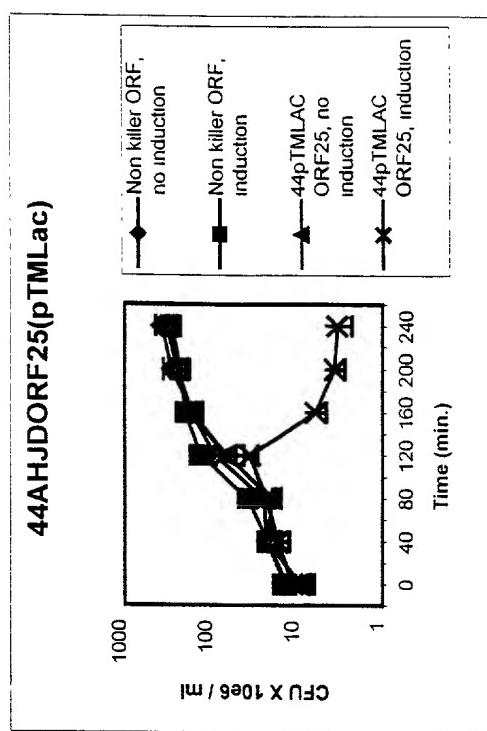
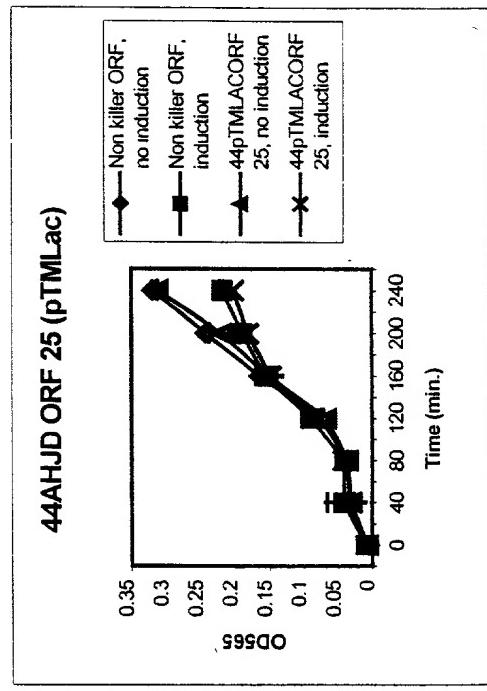
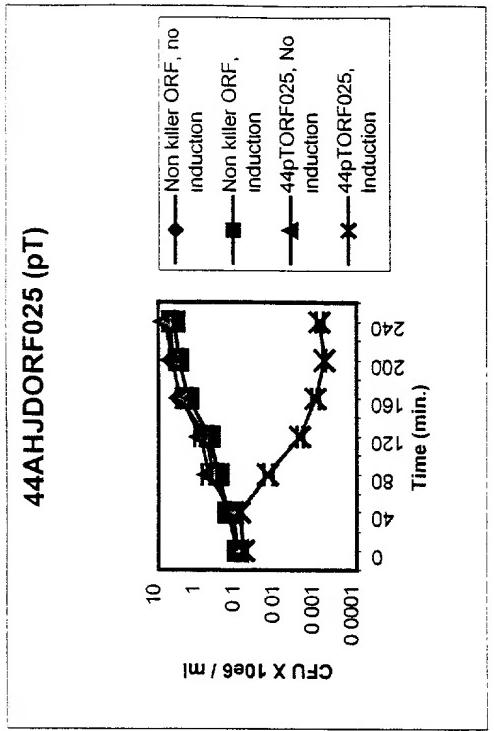
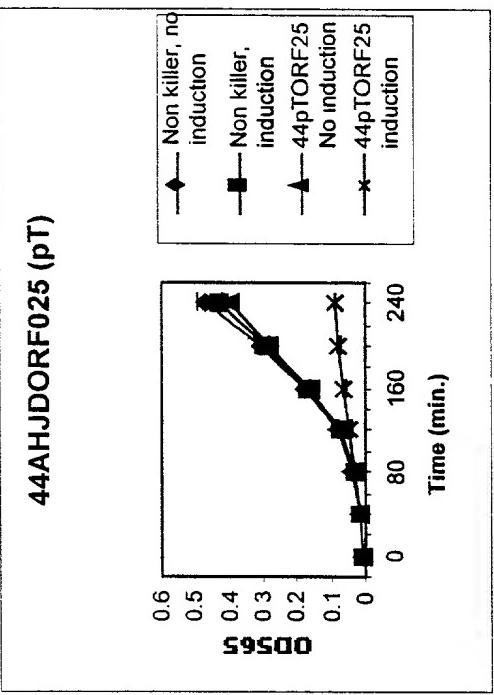


FIGURE 6

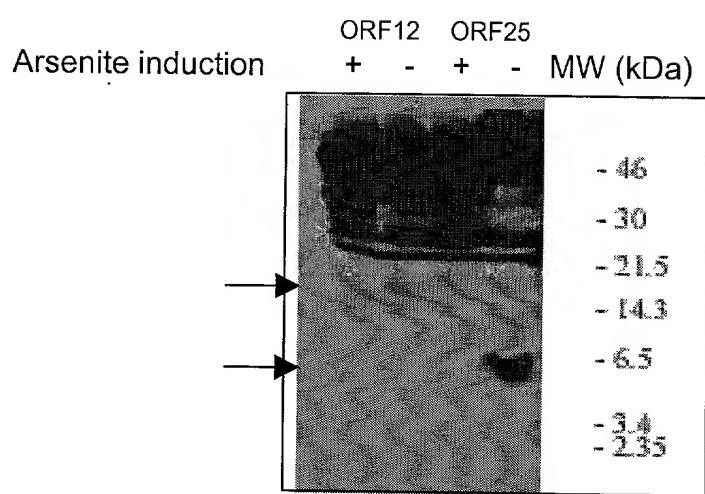


FIGURE 7A

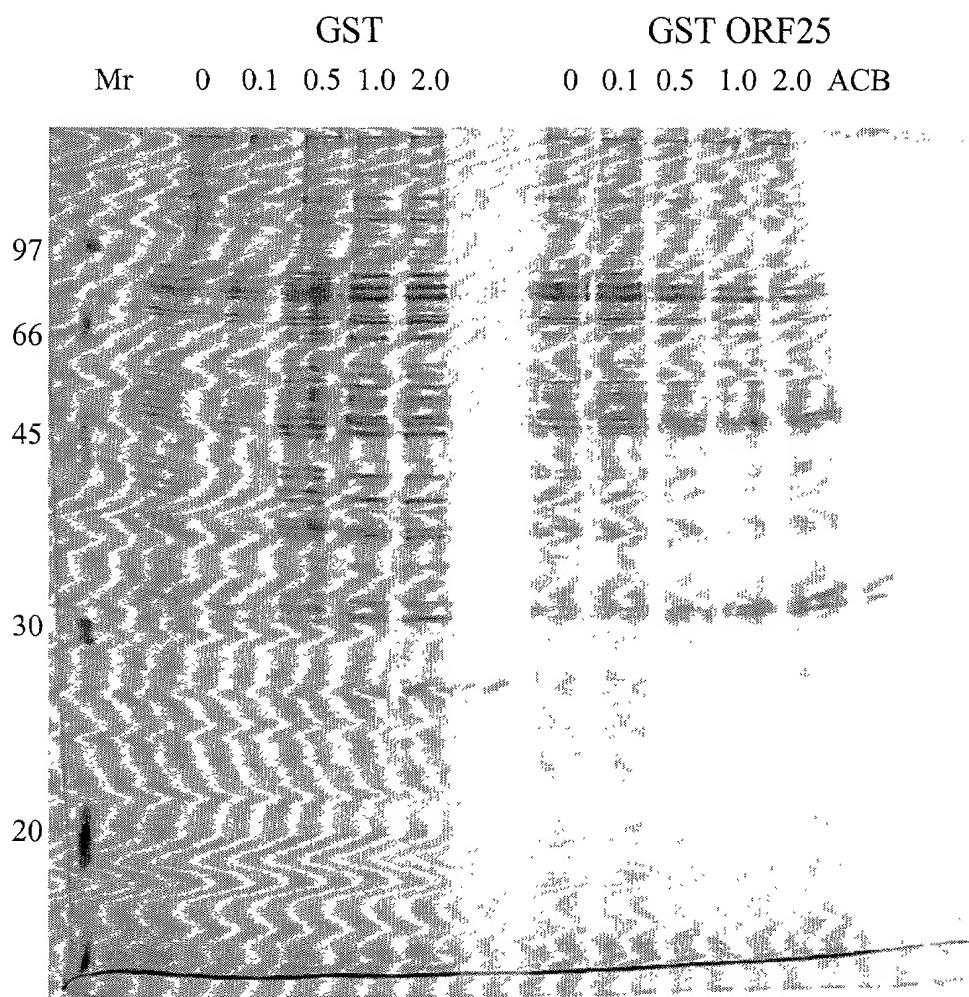


FIGURE 7B

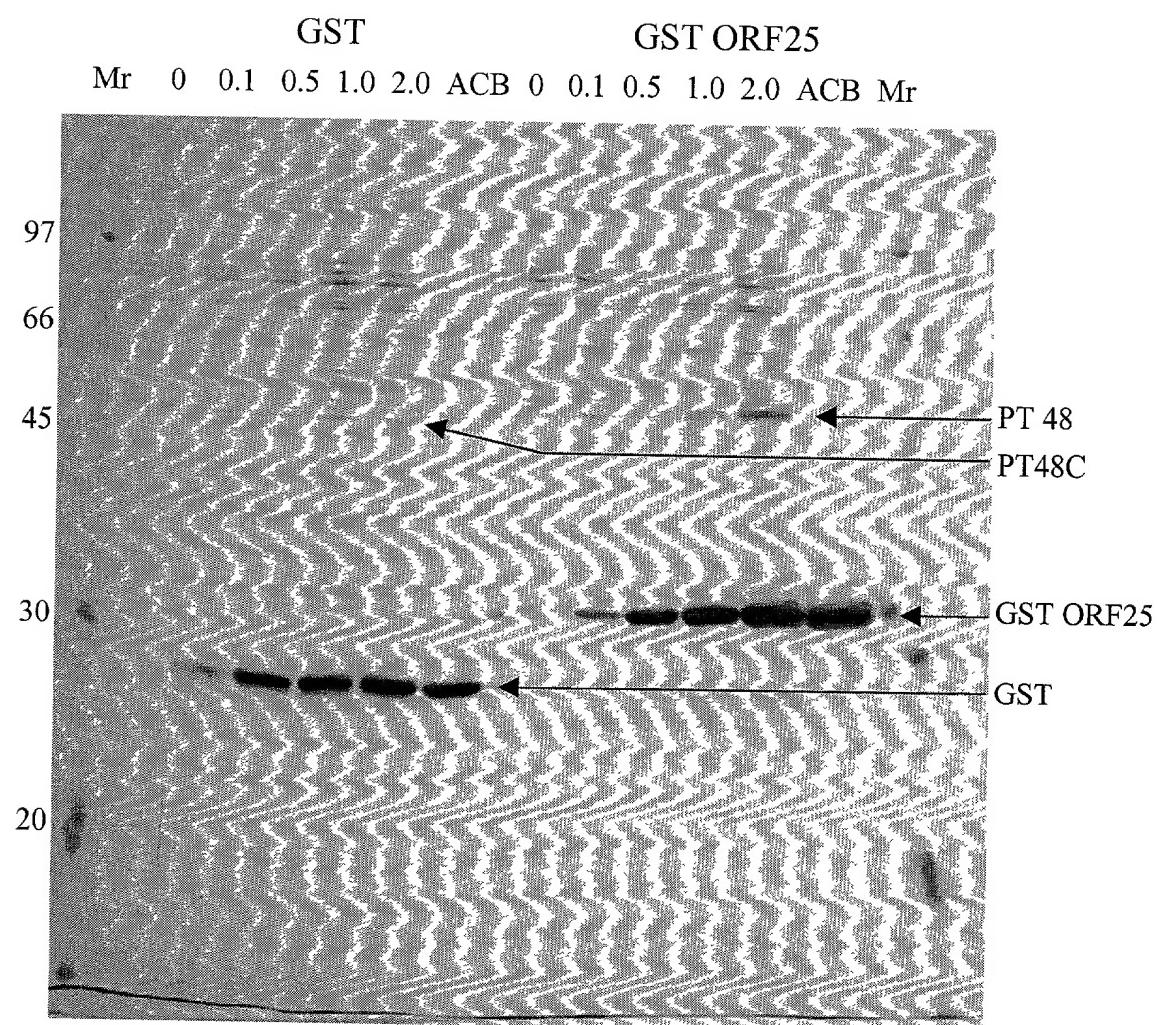


FIGURE 8

Tryptic peptide mass spectrum of 48 kDa interacting protein
(from Figure 1B)

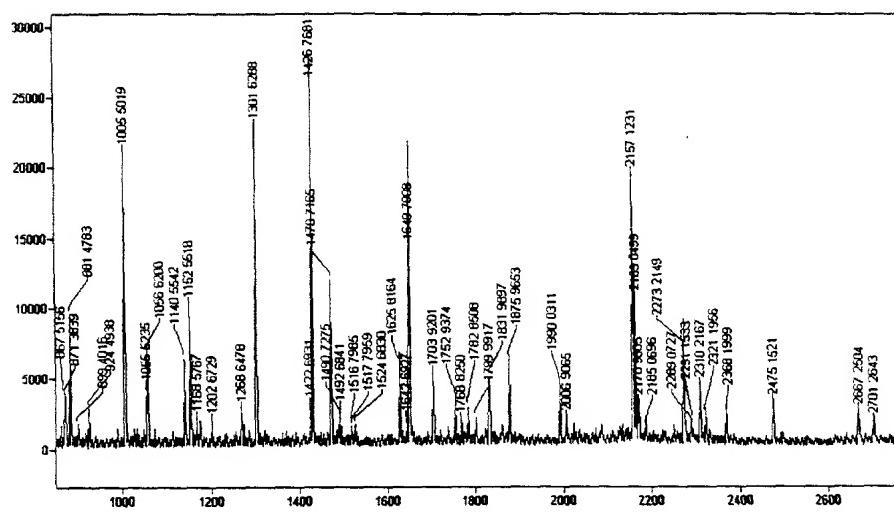


FIGURE 9

Identification of PT-S as DNA-directed DNA polymerase III Beta.

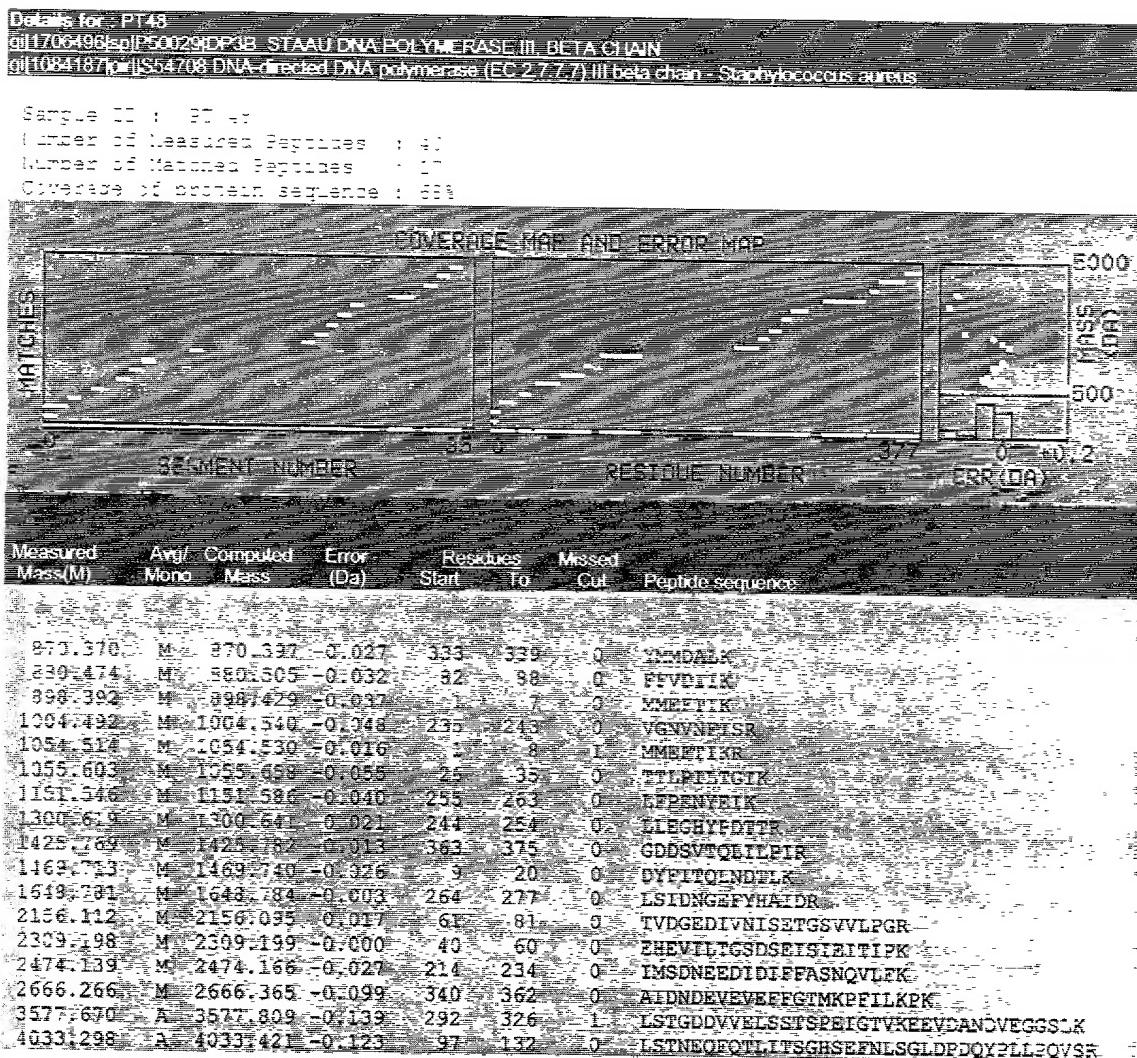


FIGURE 10

SEQ ID NO : 1 *Staphylococcus aureus* DnaN nucleotide sequence

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ATGATGGAATTCACTATTAAAAGAGATTATTTATTACACAATTAAATGACACATTAAAAA  
GCTATTTACCAAGAACATTACCTATATTAACTGGTATCAAATCGATGCCAAAGAA  
CATGAAGTTATATTAACTGGTCAGACTCTGAAATTCAATAGAAATCACTATTCTAAA  
ACTGTAGATGGCGAAGATATTGTCATATTTCAGAACAGGCTCAGTAGTACTCCTGGA  
CGATTCTTGTGATATTATAAAAAAATTACCTGGTAAAGATGTTAATTATCTACAAAT  
GAACAATTCCAGACATTAATTACATCAGGTCAATTGAAATTAAAGTGGCTTAGAT  
CCAGATCAATATCCTTATTACCTCAAGTTCTAGAGATGACGCAATTCAATTGTCGGA  
AAAGTGCTTAAAACGTGATTGCACAAACAAATTTCAGTGTCCACCTCAGAAACACGC  
CCAGTACTAATGGGTGAACTGGCTTATACAAGAAAATGAATTAATATGCACAGCGACT  
GACTCACACCGCTGGCTGAAGAAAGTTGCAGTTAGAAGATGTTCTGAAAACAAAAAT  
GTCATCATTCCAGGTAGGGCTTAGCTGAATTAAATAAAATTATGTCGACAATGAAGAA  
GACATTGATATCTTCTGCTCAAACCAAGTTTATTAAAGTTGAAATGTGAACCTT  
ATTTCGATTATTAGAAGGACATTCCTGATACAACACGTTTATCCCTGAAAACAT  
GAAATTAAATAAGTATAGACAATGGGAGTTTATCATGCGATTGATCGTGCCTTTA  
TTAGCGCGTGAAGGTGTAATAACGTTATTAAATTAAAGTACAGGTGATGACGTTGAA  
TTGTCTTCTACATCACCAGAAATTGGTACTGAAAAGAAGAAGTTGATGCAAACGATGTT  
GAAGGTGGTAGCCTGAAAATTTCATTCAACTCTAAATATATGATGGATGCTTAAAGCA  
ATCGATAATGATGAGGGTTGAAGTTGAATTCTCGGTACAATGAACCAATTATTCTAAA  
CCAAAAGGTGACGACTCGTAACGCAATTAAATTACCAATCAGAACTTACTAA
```

SEQ ID NO : 2 *Staphylococcus aureus* DnaN amino acid sequence

>gi|1084187|pir||S54708 DNA-directed DNA polymerase (EC 2.7.7.7) III beta chain -
Staphylococcus aureus

```
MMEFTIKRDYFITQLNDTLKAI SPRTTLPILTGIKIDAKEHEVILTGSDSEISIEITIPKTVGD  
EIVNI SETGSVVLPGRRFVDIKKLPGKDVKLSTNEQFQTLITSGHSEFNLSGLDPQYPLLPQVS  
RDDAIOLSV KVLKNVIAQTNFAVSTSETRPVLTGVNWLIQENEELICTATDSHRLAVRK  
LQLEDVSENKNVIIPGKALAE LNKIMSDNEEDIDIFFASNOVLFKVGNVNFISRLLEGHYPDT  
TRLFPENYEIKLSIDNGEFYHAIDRASL LAREGGNNVIKLSTGDDVV  
ELSSTSPEIGTVKEEV  
DANDVEGGSLKISFNSKYM  
MDALKAI  
DNDEVEVEF FGTMKPFI  
LKPKGDDSVTQLIL  
PIRTY
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